

**Specification**

Please amend the paragraph beginning at page 2, line 14 as follows:

--(1) To achieve the above object, the present invention provides a semiconductor device including a cooling system for controlling temperature of a refrigerant through a heating section and a radiator, the semiconductor device being connected to and cooled by the cooling system, wherein a variation width ( $\Delta T1$ ) of temperature controlled by the cooling system through the heating section and the radiator is ~~larger~~ smaller than a temperature variation ( $\Delta T2$ ) of the refrigerant caused by variations in operating conditions of the semiconductor device ( $\Delta T1 \geq \Delta T2$ ).--

Please amend the paragraph beginning at page 3, line 7 as follows:

--(3) Further, to achieve the above object, the present invention provides a vehicular cooling system installed in a vehicle comprising an internal combustion engine and a motor, the motor being controlled by a power conversion unit, the vehicular cooling system comprising a cooling unit for cooling a refrigerant; and a circulator for circulating the refrigerant cooled by the cooling unit, the cooling system operating such that the refrigerant cooled by the cooling unit is circulated by the circulator to cool the power conversion unit by the circulated refrigerant, the internal combustion engine or both the internal combustion engine and the motor are cooled by the refrigerant which has been used to cool the power conversion unit, and the refrigerant having been used to cool the internal

combustion engine or both the internal combustion engine and the motor is cooled by the cooling unit, the cooling system being constituted such that a variation width ( $\Delta T1$ ) of refrigerant temperature controlled through the internal combustion engine and the cooling unit is ~~larger~~ smaller than a temperature variation ( $\Delta T2$ ) of the refrigerant depending on variations in operating conditions of the power conversion unit ( $\Delta T1 \geq \Delta T2$ ).--

Please amend the paragraph beginning at page 4, line 2 as follows:

--(4) Still further, to achieve the above object, the present invention provides a vehicular power conversion unit mounted in a vehicle comprising an internal combustion engine and a motor, the vehicular power conversion unit converting power supplied from a battery and controlling driving of the motor, the vehicular power conversion unit being disposed, upstream of the internal combustion engine, in and cooled by a cooling system which cools the internal combustion engine by a refrigerant cooled by a cooling unit, wherein the vehicular power conversion unit comprises a casing; a cooling channel through which the refrigerant supplied from the cooling system flows; a power conversion circuit module made up of a plurality of semiconductor chips and converting the power supplied from the battery; and a conversion circuit control board made up of a plurality of electronic components and controlling driving of the semiconductor chips, the casing containing the power conversion circuit module and the conversion circuit control board, the vehicular power conversion unit

being able to suppress heat transmission from the exterior such that a temperature variation width ( $\Delta T2$ ) of the refrigerant depending on variations in operating conditions of at least the power conversion circuit module is ~~smaller~~ larger than a variation width ( $\Delta T1$ ) of temperature of the refrigerant controlled through the internal combustion engine and the cooling unit ( $\Delta T2 \leq \Delta T1$ ).--

Please amend the paragraph beginning at page 14, line 22 through page 15, line 10 as follows.

-- Thus, with the known structure, the car-mounted inverter is subjected to both of a temperature cycle within the range from the environment temperature to  $d^{\circ}\text{C}$  with start and stop of the operation, which is represented by the solid line A, and a temperature cycle within the range of  $b^{\circ}\text{C}$  to  $d^{\circ}\text{C}$  during the operation. In contrast, with the structure of this embodiment, the car-mounted inverter is subjected to both of a temperature cycle within the range from the environment temperature to  $g^{\circ}\text{C}$  with start and stop of the operation, which is represented by the solid line D, and a temperature cycle within the range of  $e^{\circ}\text{C}$  to  $g^{\circ}\text{C}$  during the operation. In other words, a variation width ( $\Delta T1$ ) of temperature controlled by the cooling system through the heating section and the radiator and a temperature variation ( $\Delta T2$ ) of the refrigerant caused by variations in operating conditions of the semiconductor device 100 satisfy the relationship of  $\Delta T1 \geq \Delta T2$ .--